

**State Water Resources Control Board and
Regional Water Quality Control Boards**

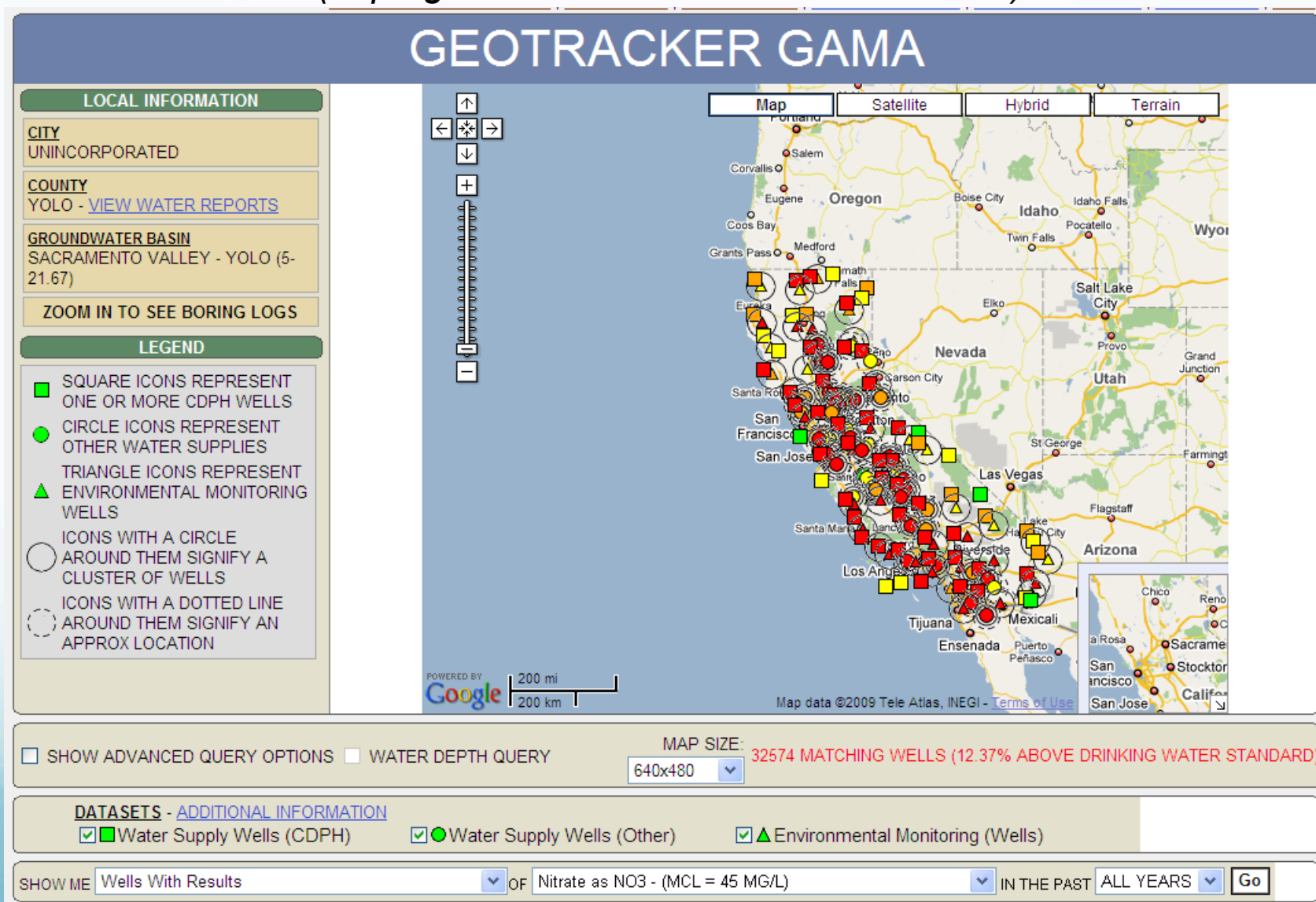
**Regulatory Authority Review
and
Concepts for a Statewide Conditional Waiver of
Waste Discharge Requirements for Composting Facilities**

**February 24, 2010
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State Water Resources Control Board**

STATEWIDE GROUNDWATER QUALITY INDICATORS

Nitrate as indicator of human impacts

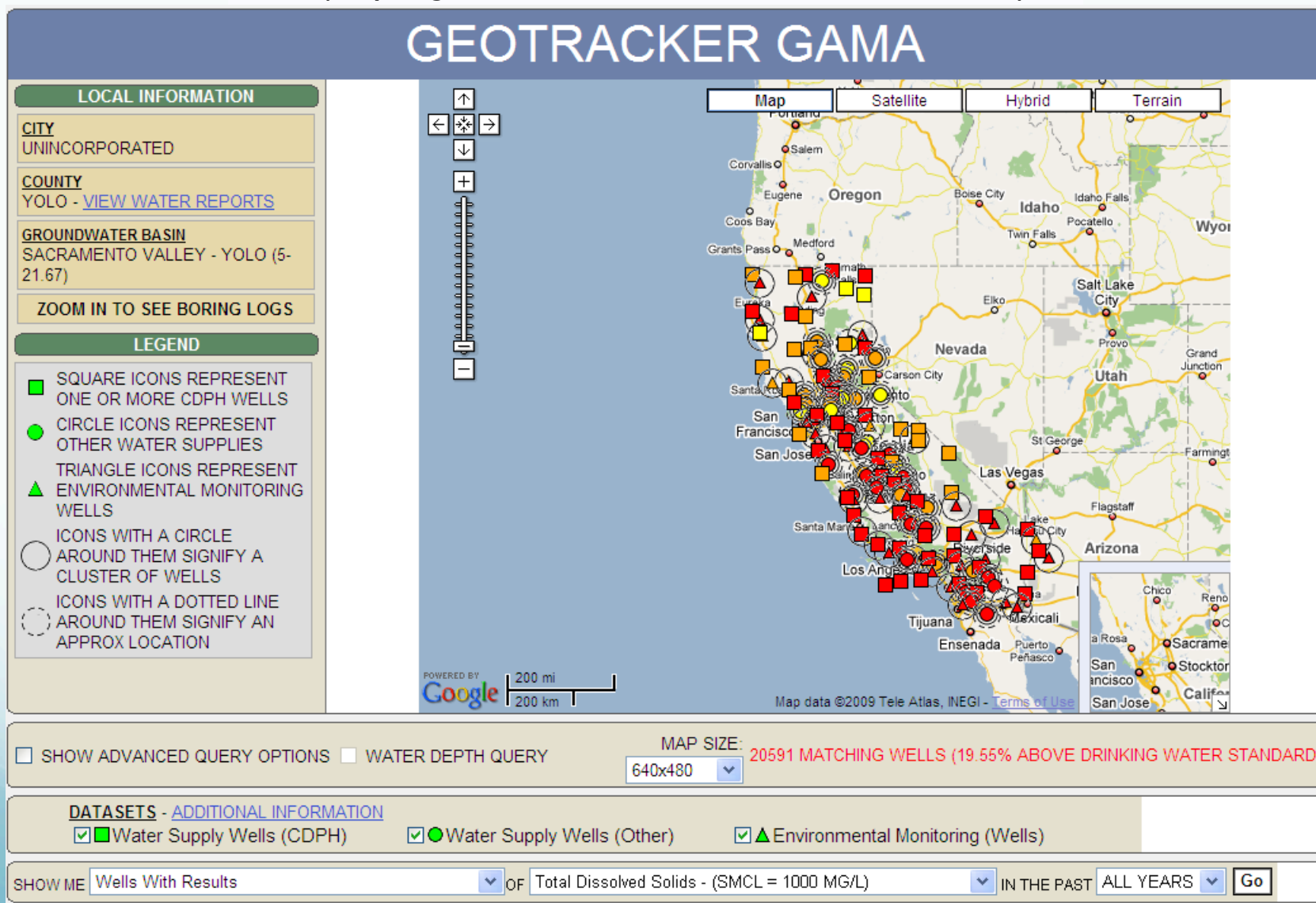
(<http://geotrackerbeta.ecointeractive.com/>)



STATEWIDE GROUNDWATER QUALITY INDICATORS

Salinity as indicator of human impacts

(<http://geotrackerbeta.ecointeractive.com/>)



STATEWIDE LAND USES AND WATER SUPPLY



WATER BOARD AUTHORITIES: FEDERAL LAW-NPDES

Clean Water Act

- Discharges of that could affect waters of the United States.
 - Most surface waters are waters of the U.S.
(Groundwater is not waters of the U.S.).
- Regulatory Mechanism: National Pollutant Discharger Elimination System (NPDES) Permit.
 - Wastewater
 - Storm water (storm drains considered waters of the U.S.)
- NPDES permits can not be waived.
- Note: NPDES permit exemption for the practice of agriculture; composting not exempt.

WATER BOARD AUTHORITIES: FEDERAL LAW-NPDES

Types of NPDES Permits

- Individual
- General

Typical Wastes Regulated

- Wastewater
 - Publicly Owned Treatment Works (POTW)
 - Refinery
 - Other point sources
- General
 - Municipal
 - Construction (may include certain composting facilities)
 - Industrial (may include certain composting facilities)

WHEN IS AN NPDES PERMIT NOT REQUIRED?

Permit exclusion (no need for NPDES permit coverage) if NO discharge to waters of the U.S. under any circumstances.

- Cannot have discharge from any source to water of the U.S.
- Possible options for NPDES permit exclusion:
 - All potential sources of discharge protected from precipitation (covered, etc.).
 - Site graded, with potential sources of discharge fully bermed.

WATER BOARD AUTHORITIES: STATE LAW

Porter-Cologne Water Quality Control Act – California Water Code (CWC), Division 7, §13000 et. seq.

- Discharges of waste that could affect waters of the State.
All surface water and groundwater are waters of the State.
- Definition of waste is very broad – could be anything that could affect water quality
- Report of Waste Discharge (ROWD) –
Required of anyone who discharges waste that could affect quality of waters of the state
Includes character, location, volume of discharge, etc.

WATER BOARD AUTHORITY: STATE LAW

Regulatory mechanisms:

- Waste Discharge Requirements (WDRs)
 - Implementing requirements specified in Title 27
 - Exempt from requirements specified in Title 27
- Waiver of WDRs with conditions

GENERAL WDR : BIOSOLIDS ORDER

State Water Boards General Biosolids Order (2004-12-DWQ)

(http://www.waterboards.ca.gov/water_issues/programs/biosolids/index.shtml)

- May be applicable for composting facilities if biosolids (treated sewage sludge) piles are present.
 - Statewide General Order and Program EIR for biosolids application to land.
 - No delegated authority for the Federal Biosolids Program: USEPA retains permitting authority under 40 CFR, Part 503.
 - Certain counties have more restrictive biosolids ordinances.

COMPOSTING FACILITIES AND TITLE 27

- Feedstocks, additives, amendments, and unfinished compost may be a threat to water quality
- Analysis of liquids sampled at composting facilities indicates potential classification as “designated waste” under Title 27
- Title 27 requires that the discharge of designated waste be managed in a Class II waste management unit
- Class II waste management unit requirements:
 - Meet siting criteria
 - Prescribed waste containment
 - Implement a groundwater monitoring program
 - Meet closure requirements
 - Prepare financial assurance mechanism

COMPOSTING FACILITIES AND WAIVERS OF WDRS

Waiver of WDRs with conditions:

- Green waste composting conditional waiver of WDRs in effect 1994 to 2003
- SB 390 (CWC §13269 et seq.) altered requirements to waive WDRs
 - Conditions and monitoring of those conditions
 - Renewal every 5-years or replacement with WDRs
 - Provides for civil liability for non-compliance
 - Consistent with applicable regional water quality control plans (Basin Plans)
 - Deemed to be in the public interest

STATEWIDE WAIVER CONCEPTS

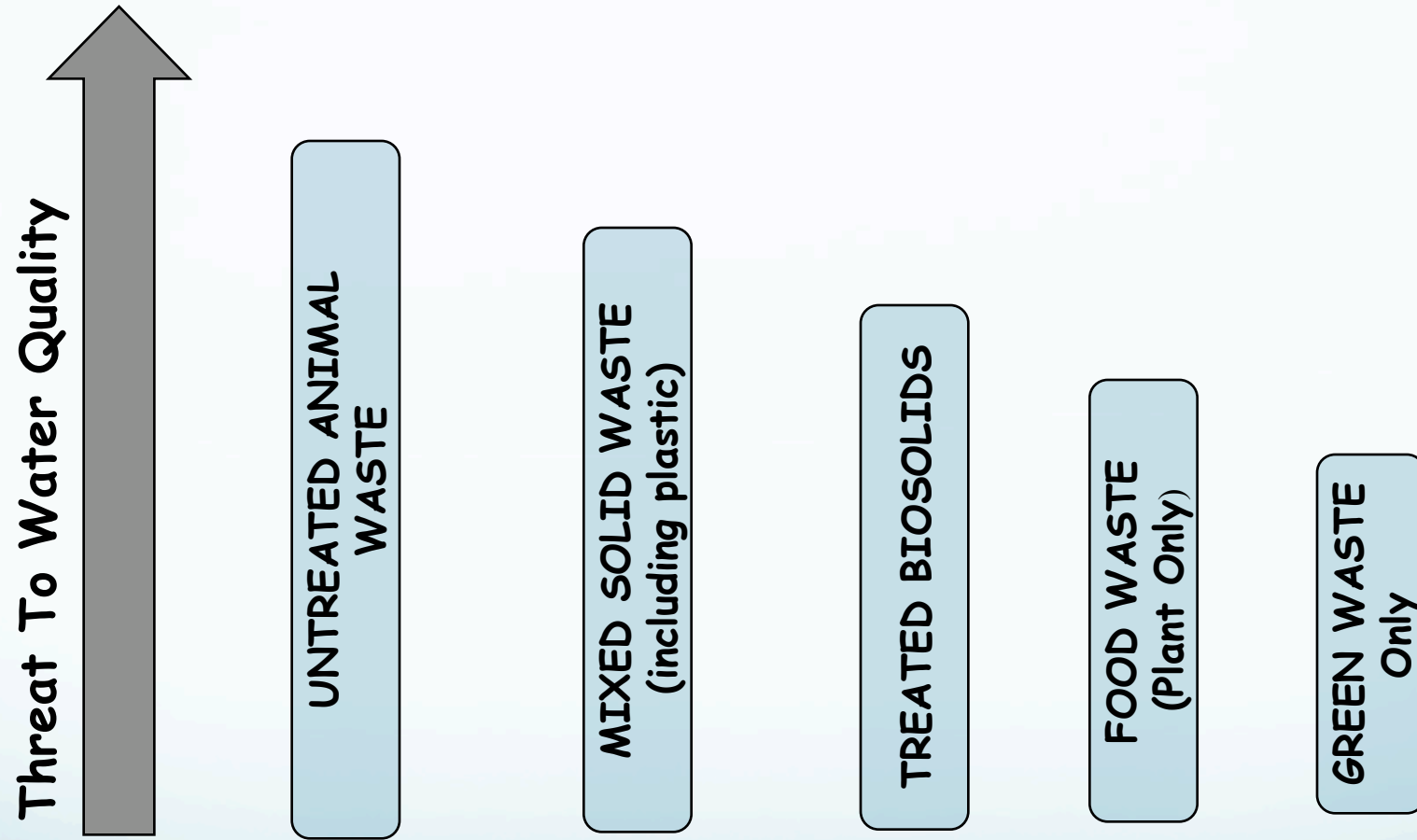
A new Statewide Conditional Waiver:

- Applicable to a variety of composting facilities, except those requiring individual WDRs
- Flexible framework
 - Streamlined Regional Water Board review and approval if meet prescriptive requirements that are tiered based on threat to water quality as a function of:
 - composting materials
 - site conditions
 - Less streamlined Regional Water Board review and approval where alternatives to prescriptive requirements are proposed

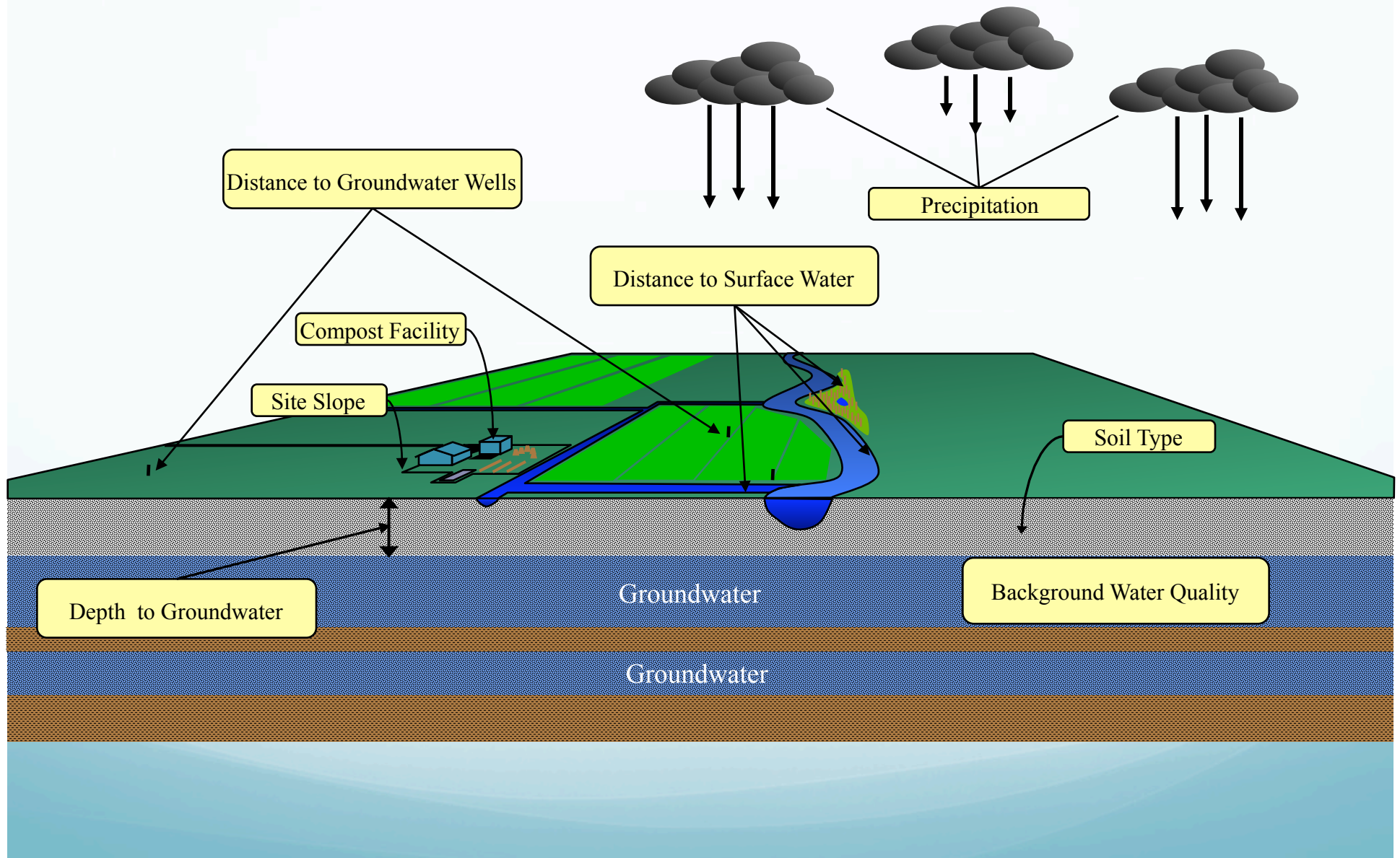
SOME CONSTITUENTS OF CONCERN IN LEACHATE AND RUNOFF AT COMPOSTING FACILITIES

- Salt (Total Dissolved Solids, Electrical Conductivity)
- Nutrients (Nitrates)
- Pathogens (E. coli.)
- Metals (Iron, Copper, Manganese, Nickel, Zinc, Aluminum, Arsenic)

FACTORS THAT INFLUENCE POTENTIAL TO IMPACT WATER QUALITY



FACTORS THAT INFLUENCE POTENTIAL TO IMPACT WATER QUALITY: SITE CONDITIONS

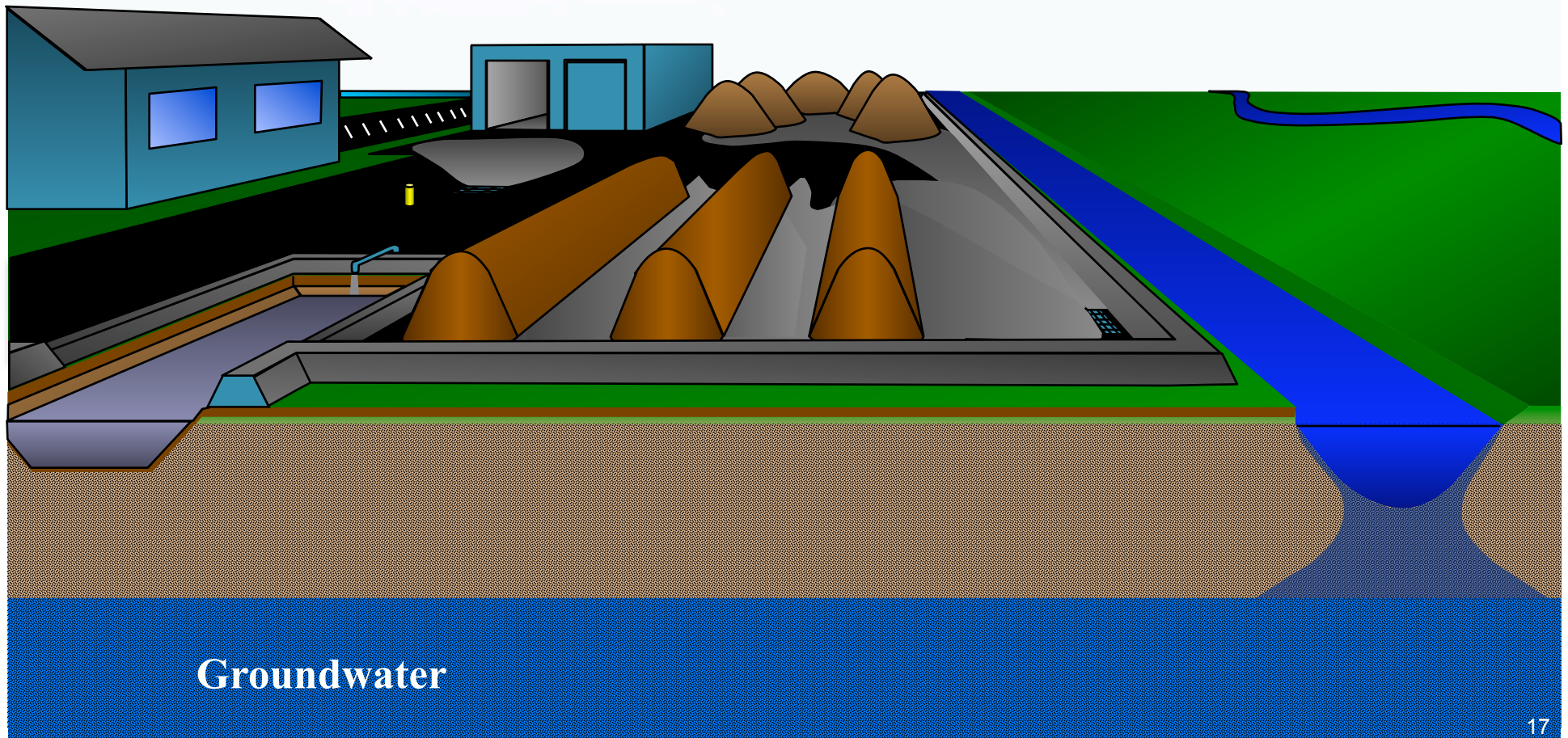


FACTORS THAT INFLUENCE POTENTIAL TO IMPACT WATER QUALITY: WATER QUALITY PROTECTION MEASURES

Scenario "A"

Measures in place, so lower threat

Composting Facility

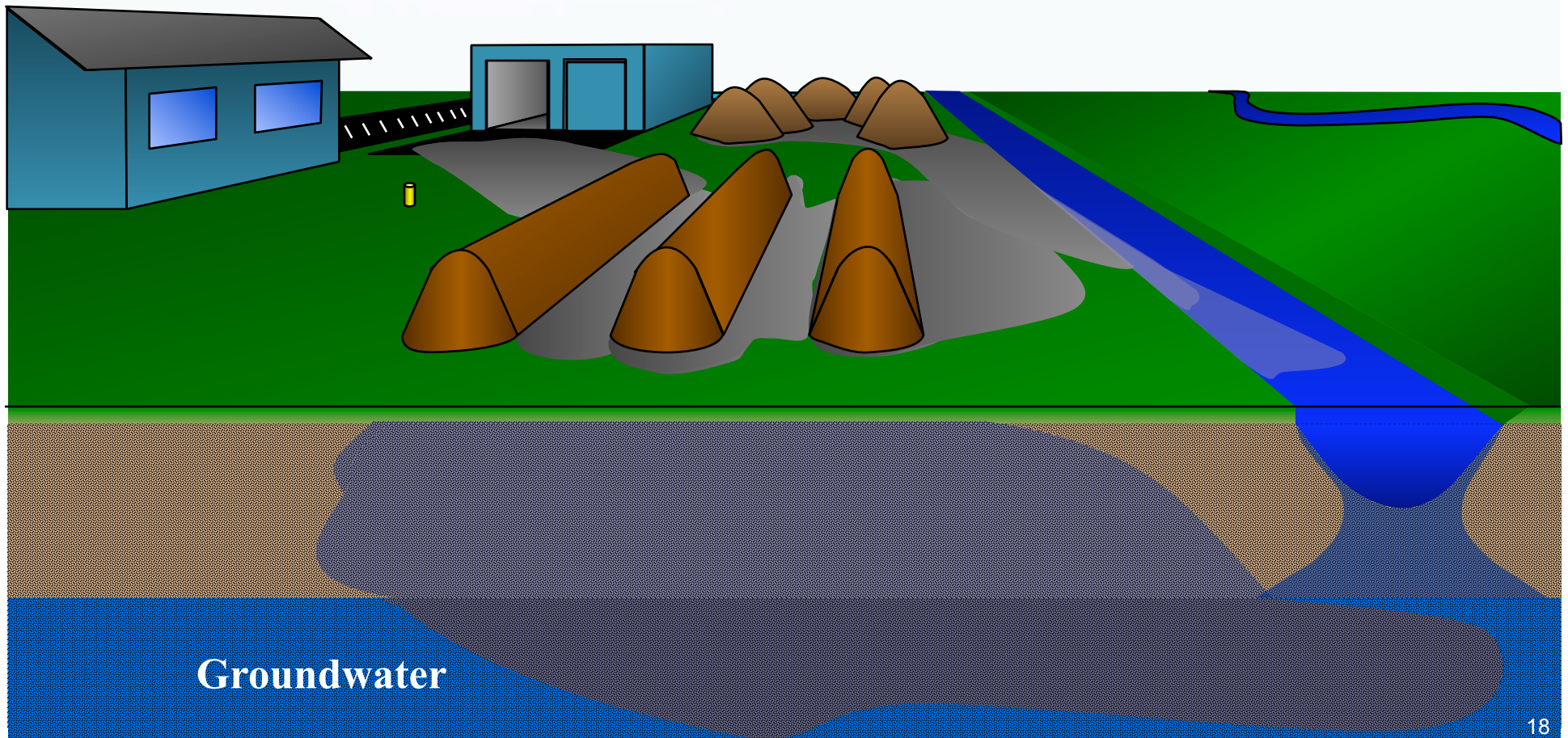


FACTORS THAT INFLUENCE POTENTIAL TO IMPACT WATER QUALITY: WATER QUALITY PROTECTION MEASURES

Scenario “Z”

No measures in place, so greater threat

Composting Facility



STATEWIDE WAIVER DEVELOPMENT AND INTERAGENCY COORDINATION

- Joint public workshop August 2009 to discuss concepts of statewide conditional waiver of WDRs
- Water Boards/CalRecycle interagency meetings
- Water Boards workgroup
- Stakeholder input
- Regulatory workshops
- State Water Board consideration of draft statewide waiver and final CEQA document.

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State Water Resources Control Board
Conditional Waiver of WDRs for Composting Facilities Website
http://www.waterboards.ca.gov/water_issues/programs/land_disposal/compost.shtml